

all those coral workers who deal daily with these common species. In order to avoid such potential travails I give my wholehearted support to Potts's application.

Comment on the proposed conservation of the specific names of *Dodecaceria concharum* Örsted, 1843 and *D. fimbriatus* (Verrill, 1879) (Annelida, Polychaeta) by the designation of a neotype for *D. concharum*
(Case 2899; see BZN 52: 27–33, 261–262)

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We write in reply to the comment by Drs Pleijel and Mackie (BZN 52: 261–262).

The basic problem, for which we attempted to find a solution by neotype designation, is that the name *Dodecaceria concharum* has been used in two different senses: (1) as an aggregate, by those authors (e.g. Fauvel, 1927) who have lumped the 'form A' and 'form B' of Caulleury & Mesnil as a single species; (2) as a segregate, by those authors who have followed Dehorne (1933) in regarding 'form B' as a distinct species, *D. caulleryi* or *D. fimbriata*. In those waters, such as the coasts of Denmark and Sweden, where only one species occurs, authors have called it *D. concharum*, and indeed it is the species so named by Örsted. Unfortunately, this is the same species ('form B' of Caulleury & Mesnil) as that named *D. caulleryi* by Dehorne and later synonymized with *D. fimbriata*. All authors who have distinguished between the two species have followed Dehorne's incorrect application of the name *D. concharum* to the parthenogenetic 'form A'. Thus the purpose of our application was to conserve the general usage of those authors who had correctly discriminated between the two species, but who had not realised that the true *D. concharum* Örsted was in fact synonymous with *D. caulleryi* (i.e. *D. fimbriata*) and that no satisfactory name was available for *D. concharum* sensu Dehorne. Although Dehorne believed Örsted's description to be 'suffisant à identifier l'animal', he incorrectly restricted the name *D. concharum* to 'form A' and gave the new name *D. caulleryi* to 'form B'. His interpretation of *D. concharum* has, until now, been followed by all authors who have distinguished between the two. To designate a neotype for *D. concharum* in the sense of Örsted's original material from the Öresund and Kattegat would not, therefore, solve the above problem. It is precisely for this reason that our proposed selection of neotype locality represents 'a deliberate misuse of Örsted's name'. Cullercoats is about the nearest locality to Denmark from which the segregate '*D. concharum*' of later authors has been recorded. Dehorne's type locality (Le Portel, Boulogne) for *D. caulleryi* is about the same distance from Denmark, but only this species ('form B') occurs there.

Pleijel & Mackie refer to the survey of marine macrobenthos from the Swedish west coast by Jägerskiöld (1971). One of us (P.H.G.) has examined all the *Dodecaceria* material from this survey, and can confirm that only one species ('form B') is present:

the *D. concharum* of Örsted = *D. fimbriata/caulleryi*. The other references cited by Pleijel & Mackie are simply those referred to by Jägerskiöld. Of these, Tauber (1879) and Levinsen (1884) are too early to recognize more than one species, so their usage of the name *D. concharum* is not significant here. Eliason (1962a) cites the old records from the Öresund but has 'keine neuen Funde', so his usage is inconclusive; in his paper on the polychaetes of the Skagerak expedition in 1933 (Eliason, 1962b) he has no records for *Dodecaceria*. The reference to Thorson (1946), however, is interesting and requires comment.

Thorson (1946, p. 106) gave an outline of the morphological and reproductive differences between the different 'forms' all referred to *D. concharum*, but gave literature references only to two brief papers published by Mesnil & Caullery in 1898, rather than to the more extensive work by Caullery & Mesnil (1898), and to Dehorne's preliminary papers of 1924 and 1927, rather than to his 1933 paper in which he established *D. caulleryi* as a new taxon. Thorson himself saw only one adult specimen from off Hellebæk which 'showed all the characteristics of form A, but seemed not to be in the season of reproduction' (it was taken on 26 July 1941). If this specimen is still extant, and if it is indeed 'form A', it would be an ideal candidate for a neotype for *D. concharum* Örsted, as not only was it obtained from one of the localities from which Örsted obtained his original material, but it would be in accordance with the general usage of that name by those authors who have accepted 'form A' and 'form B' as distinct species. It seems more likely, however, that Thorson misidentified his specimen. He states that form B1 (the atoke of *D. fimbriata*) resembles form A but is of a yellow colour. This is not, in fact, a diagnostic character as the yellow colour seen in this species is due to an accumulation of coelomocytes in the regenerating posterior segments of the animal. The older anterior segments which remain after asexual reproduction acquire black pigmentation just as in 'form A'. This black pigmentation and the absence of yellow probably led Thorson to assume his single specimen was 'form A'. If so, it would be the only Danish record and, given the low tolerance of that species to reduced salinity, as noted previously, that seems very doubtful.

Two more recent works which might have been expected to distinguish between the two species are Friedrich (1938, p. 141) and Hartmann-Schröder (1971, pp. 361–363). Friedrich included the North Sea in the distribution, but mentioned only one named species, *D. concharum*, although chaetae of both were illustrated (copied from Fauvel, 1926, p. 102, who in turn copied them from Caullery & Mesnil) with no comment on their taxonomic significance. Hartmann-Schröder indicated a distribution for *D. concharum* ranging from the Öresund to the North Sea, the Channel and the Mediterranean, as well as the North Pacific. She stated that its reproduction is only partly known, and sought to explain the two species as alternative reproductive strategies ('ein komplizierter Generationswechsel') of the same species and, like Thorson, seems only to have known the preliminary papers of Mesnil & Caullery and Dehorne. Hartmann-Schröder's confusion of the two species under one name has already been noted by Garwood (1982).

Pleijel & Mackie suggest that if *D. concharum* is to be interpreted, contrary to the application, as a senior synonym of *D. fimbriata*, then *Terebella ostreeae* may constitute a suitable choice for 'the full salinity species'. We have already indicated (para. 2 of our application), however, that Dalyell's species was more probably